

IN THE CLAIMS:

A complete listing of the claims is set forth below. Please amend the claims as follows:

1. **(Currently Amended)** A computer-implemented system for ~~associating target data with a product classification schema,~~ categorizing product data in an electronic commerce transaction, the system comprising a data association module operable to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing products, ~~into which products may be categorized,~~ the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data ~~should be~~ is associated based on an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated.

2. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

3. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

4. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

5. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

6. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

7. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

8. **(Currently Amended)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema.

9. **(Currently Amended)** The system of Claim 1, wherein the values for one or more of the product attributes of the ontologies of the first schema with which the target data ~~may be~~ is compared are stored in one or more seller databases, the values in the seller databases being identified by one or more pointers associated with one or more classes of the first schema.

10. **(Previously Presented)** The system of Claim 1, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema.

11. **(Previously Presented)** The system of Claim 1, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

12. **(Currently Amended)** A computer-implemented method for ~~associating target data with a product classification schema, categorizing product data in an electronic commerce transaction,~~ the method performed using a computer system comprising one or more processing units and one or more memory units, the method comprising:

using the computer system, accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing products, ~~into which products may be categorized,~~ the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;

using the computer system, accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;

using the computer system, determining one or more classes of the first schema with which at least a portion of the target data ~~should be~~ is associated based on an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and

using the computer system, associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated.

13. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

14. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

15. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

16. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

17 **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

18. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

19. **(Currently Amended)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema.

20. **(Currently Amended)** The method of Claim 12, wherein the values for one or more of the product attributes of the ontologies of the first schema with which the target data ~~may be~~ is compared are stored in one or more seller databases, the values in the seller databases being identified by one or more pointers associated with one or more classes of the first schema.

21. **(Previously Presented)** The method of Claim 12, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema

22. **(Previously Presented)** The method of Claim 12, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

23. **(Currently Amended)** Software for ~~associating target data with a product classification schema, categorizing product data in an electronic commerce transaction,~~ the software being embodied in a computer-readable medium and when executed operable to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing products, ~~into which products may be categorized,~~ the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data ~~should be~~ is associated based on a an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated.

24. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

25. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

26. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

27. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

28. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

29. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

30. **(Currently Amended)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema.

31. **(Currently Amended)** The software of Claim 23, wherein the values for one or more of the product attributes of the ontologies of the first schema with which the target data ~~may be~~ is compared are stored in one or more seller databases, the values in the seller databases being identified by one or more pointers associated with one or more classes of the first schema.

32. **(Previously Presented)** The software of Claim 23, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema

33. **(Previously Presented)** The software of Claim 23, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

34. **(Currently Amended)** A system for ~~associating target data with a product classification schema, categorizing product data in an electronic commerce transaction,~~ the system comprising:

means for accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing products, ~~into which products may be categorized,~~ the schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes; means for accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;

means for determining one or more classes of the first schema with which at least a portion of the target data ~~should be~~ is associated based on an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and

means for associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated.

35. **(Currently Amended)** A computer-implemented system for associating ~~target data with a product classification schema,~~ categorizing product data in an electronic commerce transaction, the system comprising a data association module operable to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing products, ~~into which products may be categorized,~~ the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data ~~should be~~ is associated based on a an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, the values being stored in one or more seller databases and identified by one or more pointers associated with one or more classes of the first schema; and

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated, the target data being associated with the classes of the first schema using one or more pointers to the target data.

36. **(Currently Amended)** A computer-implemented method for ~~associating target data with a product classification schema, categorizing product data in an electronic commerce transaction~~, the method performed using a computer system comprising one or more processing units and one or more memory units, the method comprising:

using the computer system, accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing products, ~~into which products may be categorized~~, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;

using the computer system, accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;

using the computer system, determining one or more classes of the first schema with which at least a portion of the target data ~~should be~~ is associated based on a an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, the values being stored in one or more seller databases and identified by one or more pointers associated with one or more classes of the first schema; and

using the computer system, associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data ~~should be~~ is associated, the target data being associated with the classes of the first schema using one or more pointers to the target data.

37. **(Currently Amended)** Software for ~~associating target data with a product classification schema, categorizing product data in an electronic commerce transaction,~~ the software being embodied in a computer-readable medium and when executed operable to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing products, ~~into which products may be categorized,~~ the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data ~~should be~~ is associated based on a an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, the values being stored in one or more seller databases and identified by one or more pointers associated with one or more classes of the first schema; and

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which at the least a portion of the target data ~~should be~~ is associated, the target data being associated with the classes of the first schema using one or more pointers to the target data.